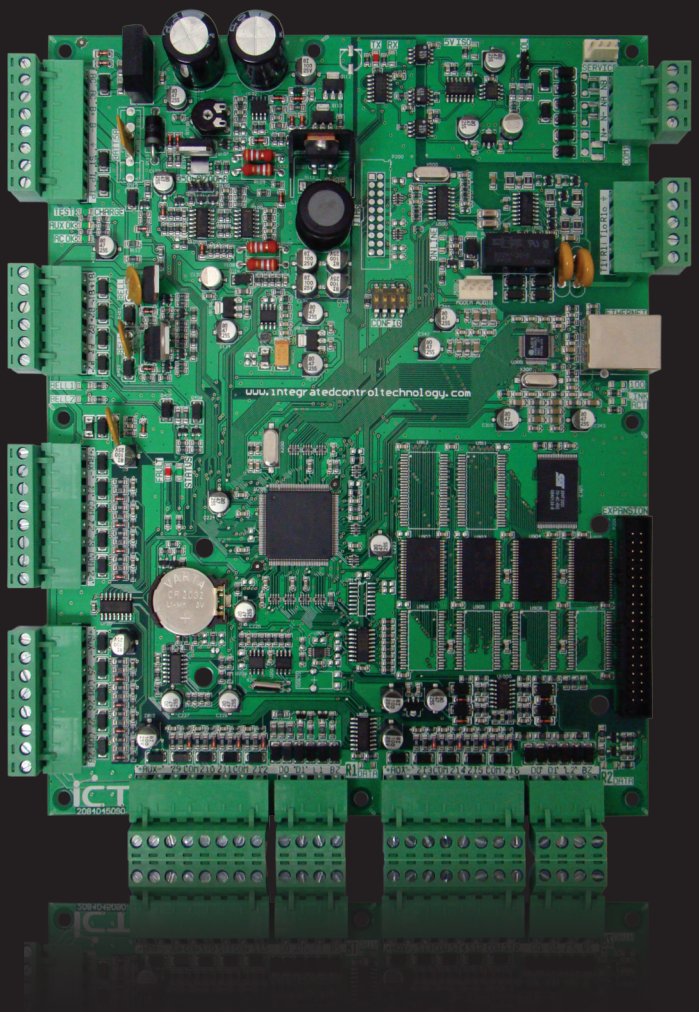
Protégé® SE Integrated System Controller



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- Internal industry standard 10/100 Ethernet.
- Communicate with Ethernet modules that are interconnected using a LAN or corporate network.
- In-built offsite line communications dialer (ContactID, SIA).
- 32 Bit advanced RISC processor with 2MB RAM and 4MB flash.
- 16x high security monitored zone inputs.
- 2x high current outputs.
- Firmware upgradable using standard IT technology.
- Enhanced technology power supply with battery charging and monitoring.
- Encrypted module network using RS-485 communication.
- 2x Wiegand or clock data readers providing two Entry/Exit Doors on-board (4 reader Multiplex Mode allows Entry and exit readers on each door).

Ethernet 10/100 Connection

The Protégé® SE Integrated System Controller provides onboard Ethernet communication to allow direct connection from a local PC or interconnect to an existing LAN/WAN:

- Directly connect the Protégé® System Management Suite across a LAN or WAN interface for instant connection and upload download.
- IP reporting functionality using the Protégé® IP Reporting Protocol, Contact ID over IP, SIA over IP and full text reporting methods. The Protégé® IP Reporting Protocol requires the Protégé® IP Reporting Bridge application operating on the remote machine or device with a suitable communications driver for the automation software being used.
- Full 10/100 compliant network interface allows the connection of the Protégé® SE Integrated System Controller to all networks at the maximum capable signaling rate Indication of link status, communication signaling rate and data transmission/reception shown on LED status indicators.

Local Monitored Power Supply

The Protégé® SE Integrated System Controller operates from a 16VAC input, utilizing a low cost transformer and providing a fully monitored 12VDC power solution using:

- Deep discharge prevention of the battery with automatic electronic cut-off.
- Manual or processor controlled battery charge selection of 350mA or 700mA.
- Intelligent charging algorithm monitors battery and AC supply allowing optimum performance to be achieved using standard lead acid batteries.
- Monitored signals for ‘Battery Low/Disconnect’ and ‘AC Failure’ using local trouble zones.

Integrated Arming/Disarming

The Protégé® SE Integrated System Controller features advanced integration of arming and disarming solutions for control of up to 250 alarm areas:

- Deny access to a user based on the status of the area and the ability for the user to control the area they are entering in turn reducing false alarms.
- Implement bank vault areas to control and manage the time delayed access and unlocking of vault areas in banking facilities without the need for extra hardware control devices.
- Prevent access to a keypad using a card and PIN function or allow card presentation to automatically login the user at the associated keypad.
- Disarm an area associated with an elevator floor on access when using the destination reporting option or prevent the user from gaining access to the floor based on the area status associated with the floor.
- Arm large numbers of areas using area groups.

Integratred Access Control

The Protégé® SE Integrated System Controller provides a highly sophisticated access control solution with large user capacity and extensive features:

- Utilize primary and secondary access levels to manage users over simple scheduled periods and time zones.
- Assign Door groups, Menu groups, Area groups, Floor groups and Elevator groups to an access level for flexible user management. Each group can optionally access a secondary group to provide multiple levels of user access.
- System wide global anti-pass back, the Protégé® SE Integrated System Controller can maintain and control users area status throughout the entire system with hard and soft anti-pass back configuration options.
- Multiple card presentation options allows the use of access control cards, tags or other credentials to arm and disarm areas associated with doors.
- Count users entering an area and arm the area when the count reaches a terminal number or deny access to users based on a maximum user count.

Automation Functions

Automation points can be controlled from the Protégé® Alphanumeric LCD Keypad for the management of any controllable device such as lighting, air conditioning and signage. Access directly from the keypad the automation points allow a user interface to specific programmable Outputs that a user can control.

Link automation points to programmable functions to provide sophisticated control logic at the selection of an automation point. Text names can be set for automation points allowing a scrollable list of controllable items in the system such as ‘Office A/C’ or ‘Outside Lights’.

Programmable Functions

Programmable functions allow for the use of special applications that are configured in the Protégé® SE Integrated System Controller for Logic, Area, Door and many other controllable devices:

- Process logic functions to allow complex equations to be evaluated using the special internal memory registers and PGM Output status.
- Output of programmable functions can be directed to an action, memory region for storage and later use or a Programmable Output.
- Inclusion of special applications to reduce installation time for the control and automation of garden lighting, external lighting and electronic movement sensors with auto manual operation.
- Control of Doors, Areas, Elevators and PGM’s can be easily programmed and managed.
- Starting and stopping of functions allows them to be managed remotely as required including special run once options to allow manual control of a function that is controlled by an operator.

Connectivity and System Expansion

Expansion of the Protégé® System with the onboard local zone (input) and PGM (Output) from the Protégé® SE Integrated System Controller allows convenient cost effective expansion without the increased cost of modules for simple system functions:

- 16x onboard zone inputs each can be programmed to require EOL (End Of Line), Dual EOL or direct contact.
- 2x Bell/Siren Outputs with fully monitored operation.
- Use the Protégé® Alphanumeric LCD Keypad to expand the number of LCD keypads within an installation.
- Zone expansion is provided on nearly all modules as part of the Protégé® Systems integrated structure and provides a dual function for many of the zone input configurations. Use the Protégé® 16 Zone Input Expander to expand the number of zone inputs on the Protégé® System.
- Programmable Output expansion is provided directly on the module network by the Protégé® 16 PGM Output Expander and incorporates 16x high current FORM C relays and fire control functions.
- Expand the access control reader connections in the Protégé® System with the Protégé® Mini 2 Reader Expander, Protégé® Intelligent 2 Reader Expander, Protégé® Standard 2 Reader Expander or the Protégé® Ethernet 2 Reader Expander. All providing two additional readers (4 Readers using entry/exit configuration) and various options with local autonomous operation, power supply and Ethernet options.

Integration

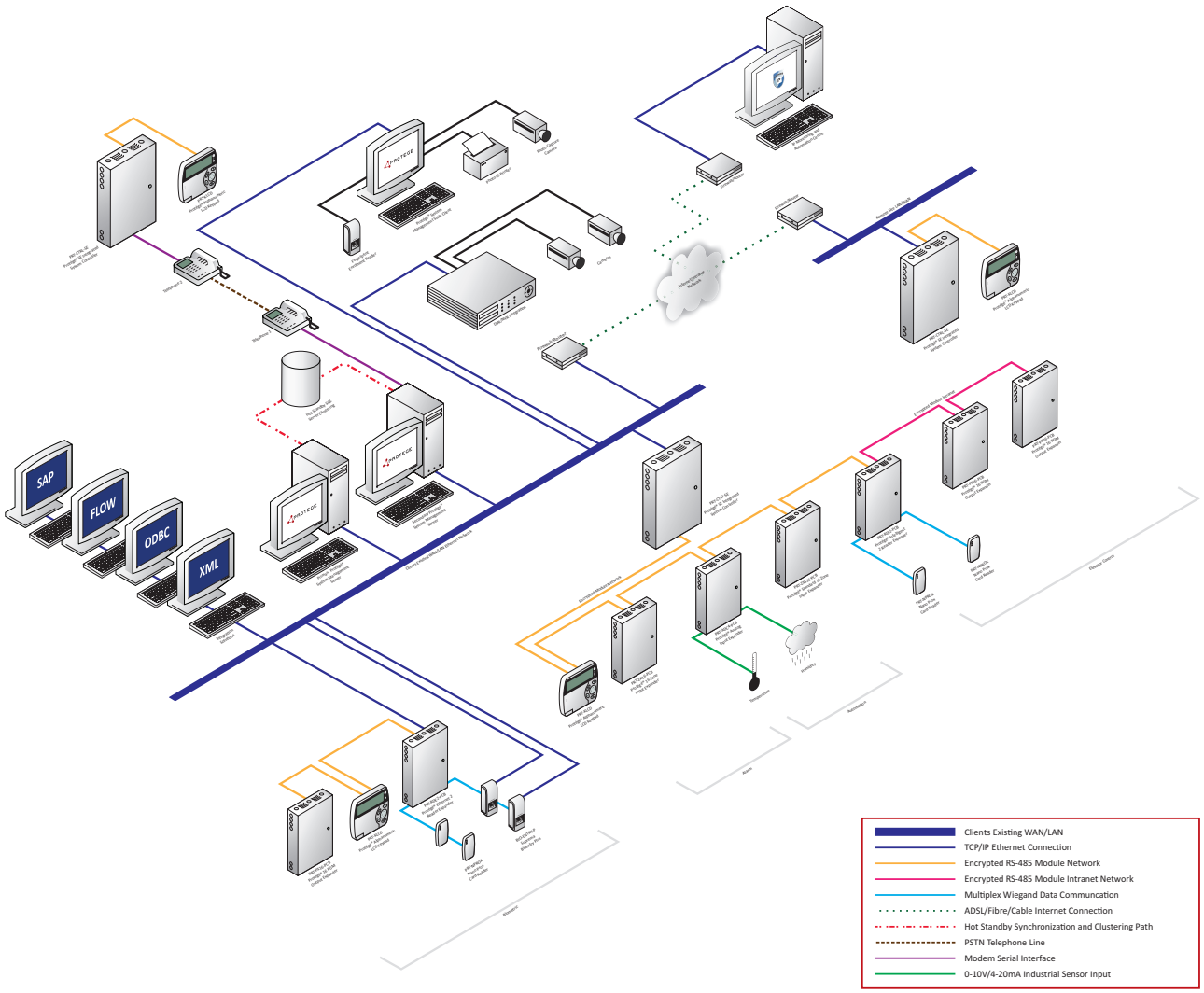
Link the Protégé® System with intelligent locking solutions through Integrated Control Technologies comprehensive world class solution partners:

HI-O TECHNOLOGY™ aperio™ TZ™

Communication

RS-485 communication interface for module communication, onboard 2400bps modem with dual line input and a 10/100 Ethernet communications port gives a complete solution:

- Network RS-485 port used for all network communication functions and interconnects to other modules with full galvanic isolation.
- On board 2400bps modem interface to allow all popular alarm reporting formats and the ability for remote connection from the Protégé® System Management Suite.
- 10/100Mbps Ethernet interface for communication with the Protégé® System Management Suite and other applications and functions.



Multifunction Reporting Services

Utilizing the latest functionality in communication services the Protégé® SE Integrated System Controller incorporates a host of communication options:

- Monitor telephone line inputs using the monitor phone service and answer incoming calls on local modem interface using answer machine override and high security remote call back options.
- Report alarms using Contact ID, SIA Level 2.
- Communicate with terminal programs using the Telnet Terminal option and Output the data in ASCII, HEX with custom format options and acknowledgement settings to allow connection of third party applications directly to the Protégé® SE Integrated System Controller.
- Send IP based reporting protocols using the onboard Ethernet communication interface and Protégé® IP Reporting Armor IP formats.

Upgradable Firmware

Utilizing the latest flash technology and high performance communication interface the firmware of the Protégé® SE Integrated System Controller can be updated using industry standard applications.

Electronic Bell/Siren Outputs

High current electronic monitored Bell/Siren control Outputs:

- Indication of Bell/Siren Outputs activation using LED. Bell/Siren failure monitoring or lock disconnected (tamper) displayed as indicator and reported using trouble zone.
- Automatic shutdown on bell over current when activated or shorted. Automatic restore on next deactivation/activation cycle. Shutdown reported using trouble zone.

System Capacites	Standard Profile	Maximum
Users	2000	10000
Events	2000	4000
Schedules	128	248
Doors	16	128
Inputs	464	1104
Outputs	420	1108
Zone (Input) Expanders	16	64
PGM (Output) Expanders	8	32
Analog Expanders	8	16
Keypad Modules	32	48
Reader Expanders	8	64

Memory profiles increase the flexibility of the Protégé® System by providing a variety of predefined or custom configurations to suite most installations. Please refer to the Protégé® SE Integrated System Controller Installation Manual for more details.

Technical Specifications	
Operating Voltage	15.5 to 16.5VAC, 50-60Hz @ 40VA (Max)
Operating Current	280mA (Typical)
Total Combined Current	1.8A (Max)
DC Output (Auxiliary)	700mA (Typical) 1.1A (Max) Electronic Shutdown at 1.1A
B1/B2 DC Outputs (Continuous)	8 Ohm 20W Siren or 700mA (Typical)
B1/B2 DC Outputs (Inrush)	1000mA
Battery Charging	350mA/700mA
Battery Low	11.2VDC
Battery Restore	12.5VDC
Electronic Disconnection	8.76VDC
Communication (Ethernet)	1x 10/100Mbps Ethernet Communication Link
Communication (Serial)	1x Isolated RS-485 Communication Interface Port 12VDC @ 28mA (Input)
Communication (Modem)	1x 2400bps Modem Communication
Readers (Standard Mode)	2x Wiegand or clock data readers providing one Entry/Exit Door or two Entry/Exit only Doors
Readers (Multiplex-reader Mode)	4x Wiegand Readers (connected in Multiplex Reader mode) providing any combination of Entry or Exit for two Doors
Zone Inputs (System Zones)	16x High Security Monitored Zone Inputs
Tamper Input	Dedicated Hardware Tamper Input
PGM Outputs	6x 50mA (Max) Open Collector Output for reader LED and beeper or general functions
Status Output	1x 50mA (Max) Open Collector Output
Operating Temperature	0˚ to 55˚C (41˚ to 131˚F)
Storage Temperature	-10˚ to 85˚C (14˚ to 185˚F)
Humidity	0% to 85% (non condensing)
Dimensions (L x W x H)	234 x 183 x 35mm (9.21 x 7.20 x 1.37”)
Weight	790g (27.86oz)

The size of conductor used for the supply of all power to the Protégé® SE Integrated System Controller should be adequate in size to prevent voltage drop at the terminals of no more than 5% of the rated voltage. Specifications are subject to change without notice, please visit www.incontrol.co.nz for updated information.

Ordering Code	Description
PRT-CTRL-SE	Protégé® SE Integrated System Controller

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Designers and manufacturers of integrated electronic access control, security and building automation products.
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International Compliance Standards:
The Protégé® SE Integrated System Controller complies with the following international standards. For an installation of the Protégé® SE Integrated System Controller to comply with any of the standards all installation procedures and programming configuration settings must be made in accordance with the required standard.

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